

SEQUENCE LISTING

<110> CHEN, YAN
KUNG, HSIANG-FU
LIN, MARIE C.M.
LUK, K.D.K.

<120> A COMBINED ADENO-ASSOCIATED VIRUS AND ADENOVIRUS
COCKTAIL GENE DELIVERY SYSTEM FOR HIGH EFFICIENCY
GENE EXPRESSION WITHOUT ELICITING IMMUNE
RESPONSE IN IMMUNO-COMPETENT SUBJECTS

<130> V9661.0074

<140>

<141>

<150> 60/455,188

<151> 2003-03-17

<160> 2

<170> PatentIn Ver. 3.2

<210> 1

<211> 1547

<212> DNA

<213> Homo sapiens

<400> 1

```

ggggacttct tgaacttgca gggagaataa cttgcgacc ccactttgcg ccggtgcctt 60
tgccccagcg gagcctgctt cgccatctcc gagccccacc gccctccac tcctcgccct 120
tgcccagacac tgagacgctg tccccagcgt gaaaagagag actgcgaggc cggcaccg 180
gagaaggagg aggcaaagaa aaggaacgga cattcggtcc ttgcgccagg tcctttgacc 240
agagtttttc catgtggacg ctctttcaat ggacgtgtcc ccgctgtctt cttagacgga 300
ctgcggtctc ctaaaggctc accatggtgg ccgggacccg ctgtcttcta gcgttgctgc 360
ttccccaggt cctcctgggc ggccgaggct gcctcggtcc ggagctgggc cgcaggaagt 420
tcgcggcggc gtcgtcgggc cgcctctcat ccagccctc tgacgaggtc ctgagcag 480
tcgagttgcg gctgctcagc atgttcggcc tgaaacagag acccaccccc agcaggggac 540
ccgtggtgcc cccctacatg ctagacctgt atcgcaggca ctcaggctcag ccgggctcac 600
ccgccccaga ccaccgggtg gagagggcag ccagccgagc caacactgtg cgcagcttcc 660
accatgaaga atctttggaa gaactaccag aaacgagtg gaaaacaacc cggagattct 720
tctttaattt aagttctatc cccacggagg agtttatcac ctcagcagag cttcagggtt 780
tccgagaaca gatgcaagat gctttaggaa acaatagcag ttccatcac cgaattaata 840
tttatgaaat cataaaacct gcaacagcca actcgaaatt ccccgtagac agacttttgg 900
acaccagggt ggtgaatcag aatgcaagca ggtgggaaag ttttgatgtc acccccgtg 960
tgatgcggtg gactgcacag ggacacgcca accatggatt cgtggtggaa gtggccact 1020
tggaggagaa acaagggtgc tccaagagac atgttaggat aagcaggctt ttgcaccaag 1080
atgaacacag ctggtcacag ataaggccat tgctagtaac ttttggccat gatggaaaag 1140
ggcatcctct ccacaaaaga gaaaaacgtc aagccaaaca caaacagcg aaacgcctta 1200
agtcacgctg taagagacac ctttgtacg tggacttcag tgacgtgggg tggaatgact 1260
ggattgtggc tccccgggg tatcacgcct tttactgcca cggagaatgc cttttctctc 1320
tggtgatca tctgaactcc actaatcatg ccattgttca gacgttggtc aactctgtta 1380
actctaagat tcctaaggca tgctgtgtcc cgacagaact cagtgtatc tcgatgctgt 1440
accttgacga gaatgaaaag gttgtattaa agaactatca ggacatggt gtggagggtt 1500
gtgggtgtcg ctagtacagc aaaattaaat acataaatat atatata 1547

```

```
<210> 2
<211> 396
<212> PRT
<213> Homo sapiens
```

<400> 2

Met Val Ala Gly Thr Arg Cys Leu Leu Ala Leu Leu Leu Pro Gln Val
1 5 10 15

Leu Leu Gly Gly Ala Ala Gly Leu Val Pro Glu Leu Gly Arg Arg Lys
20 25 30

Phe Ala Ala Ala Ser Ser Gly Arg Pro Ser Ser Gln Pro Ser Asp Glu
35 40 45

Val Leu Ser Glu Phe Glu Leu Arg Leu Leu Ser Met Phe Gly Leu Lys
50 55 60

Gln Arg Pro Thr Pro Ser Arg Asp Ala Val Val Pro Pro Tyr Met Leu
65 70 75 80

Asp Leu Tyr Arg Arg His Ser Gly Gln Pro Gly Ser Pro Ala Pro Asp
85 90 95

His Arg Leu Glu Arg Ala Ala Ser Arg Ala Asn Thr Val Arg Ser Phe
100 105 110

His His Glu Glu Ser Leu Glu Glu Leu Pro Glu Thr Ser Gly Lys Thr
115 120 125

Thr Arg Arg Phe Phe Phe Asn Leu Ser Ser Ile Pro Thr Glu Glu Phe
130 135 140

```

Ile Thr Ser Ala Glu Leu Gln Val Phe Arg Glu Gln Met Gln Asp Ala
145                               150                   155                   160

```

Leu Gly Asn Asn Ser Ser Phe His His Arg Ile Asn Ile Tyr Glu Ile
165 170 175

Ile Lys Pro Ala Thr Ala Asn Ser Lys Phe Pro Val Thr Arg Leu Leu
180 185 190

Asp Thr Arg Leu Val Asn Gln Asn Ala Ser Arg Trp Glu Ser Phe Asp
195 200 205

```
Val Thr Pro Ala Val Met Arg Trp Thr Ala Gln Gly His Ala Asn His
210                               215                   220
```

Gly Phe Val Val Glu Val Ala His Leu Glu Glu Lys Gln Gly Val Ser
225 230 235 240

Lys Arg His Val Arg Ile Ser Arg Ser Leu His Gln Asp Glu His Ser
245 250 255

Trp Ser Gln Ile Arg Pro Leu Leu Val Thr Phe Gly His Asp Gly Lys
260 265 270

Gly	His	Pro	Leu	His	Lys	Arg	Glu	Lys	Arg	Gln	Ala	Lys	His	Lys	Gln	275	280	285
Arg	Lys	Arg	Leu	Lys	Ser	Ser	Cys	Lys	Arg	His	Pro	Leu	Tyr	Val	Asp	290	295	300
Phe	Ser	Asp	Val	Gly	Trp	Asn	Asp	Trp	Ile	Val	Ala	Pro	Pro	Gly	Tyr	305	310	315
His	Ala	Phe	Tyr	Cys	His	Gly	Glu	Cys	Pro	Phe	Pro	Leu	Ala	Asp	His	325	330	335
Leu	Asn	Ser	Thr	Asn	His	Ala	Ile	Val	Gln	Thr	Leu	Val	Asn	Ser	Val	340	345	350
Asn	Ser	Lys	Ile	Pro	Lys	Ala	Cys	Cys	Val	Pro	Thr	Glu	Leu	Ser	Ala	355	360	365
Ile	Ser	Met	Leu	Tyr	Leu	Asp	Glu	Asn	Glu	Lys	Val	Val	Leu	Lys	Asn	370	375	380
Tyr	Gln	Asp	Met	Val	Val	Glu	Gly	Cys	Gly	Cys	Arg					385	390	395